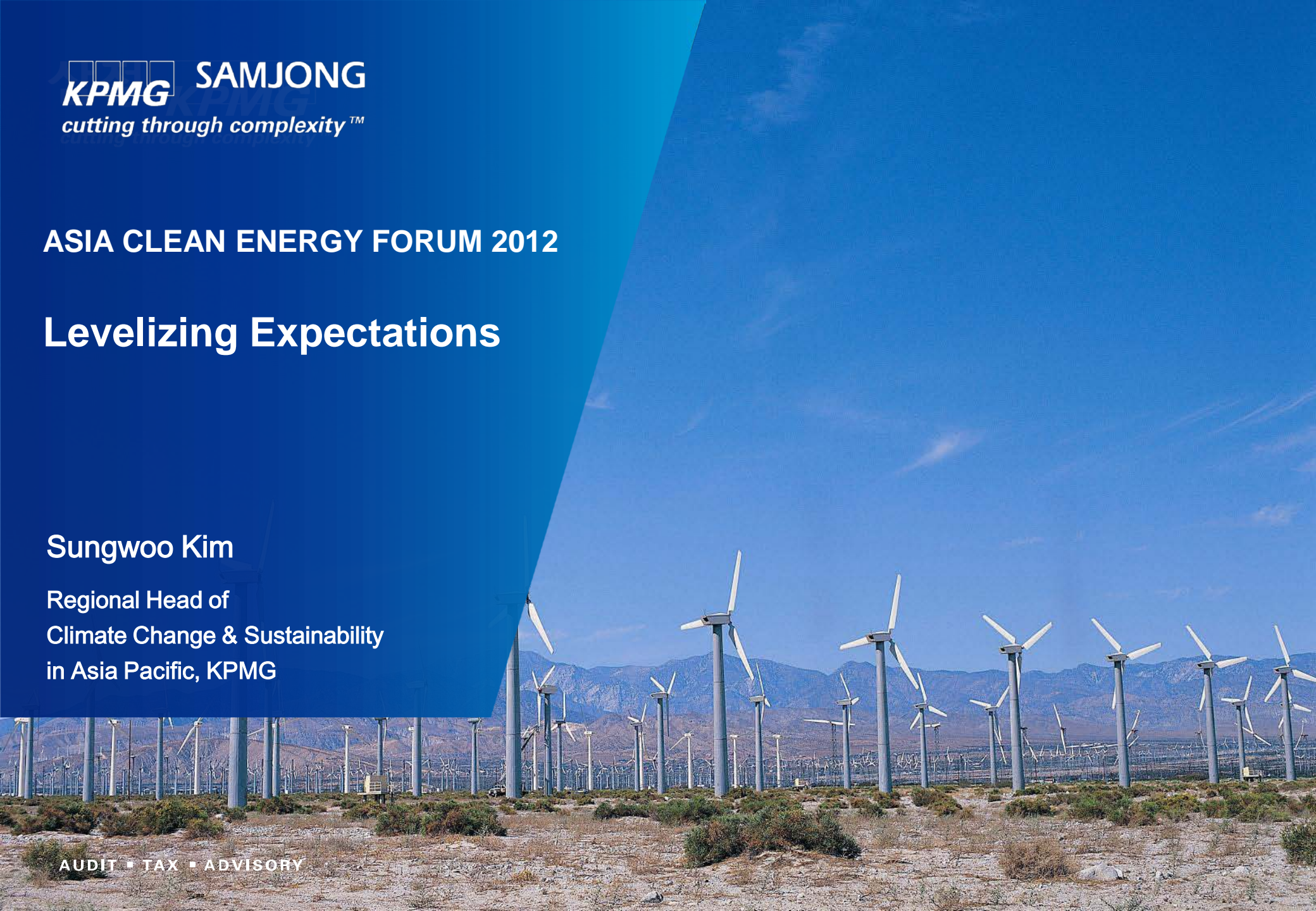


ASIA CLEAN ENERGY FORUM 2012

Levelizing Expectations

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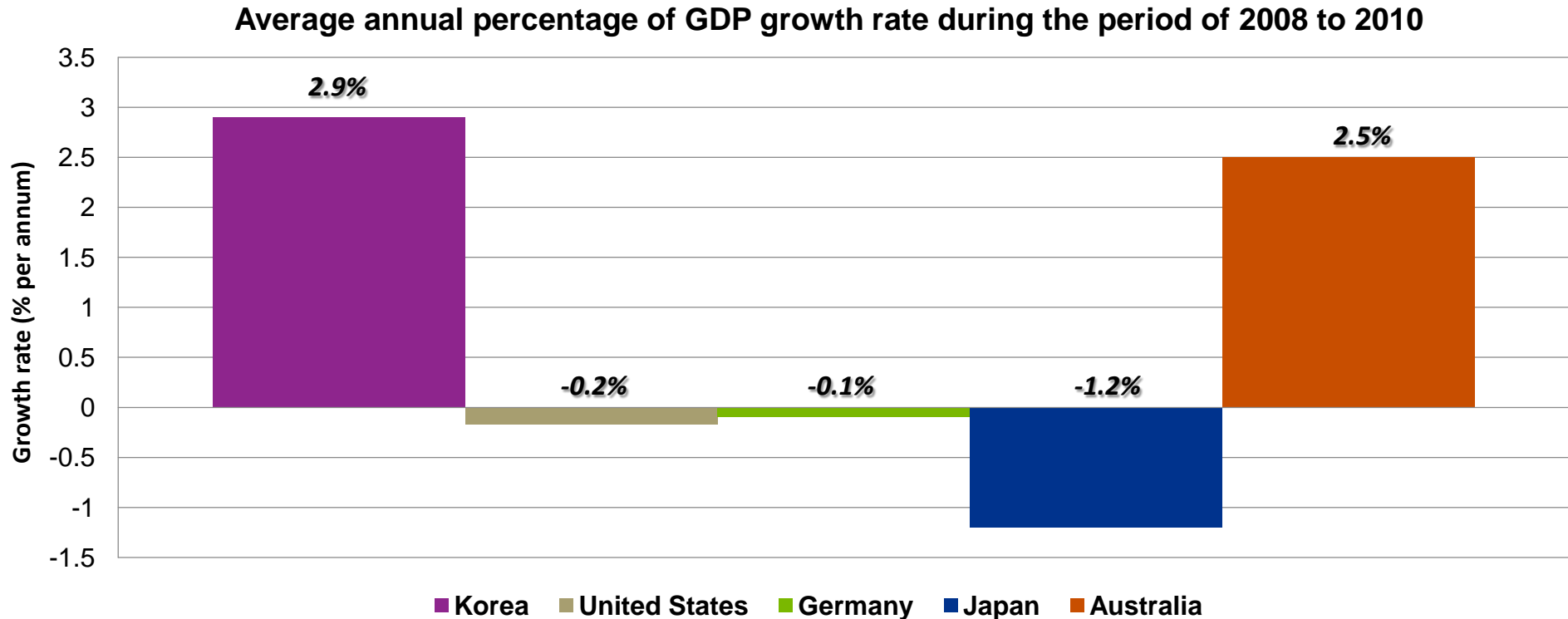


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| <i>Global shift of investors</i> | <i>[03]</i> |
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Global shift of investors

Business opportunities with Korean investors

- ❑ In the midst of the current global financial crisis, Korea's economy has remained robust.
 - Korea shows positive GDP growth rate despite the global economic downturn.

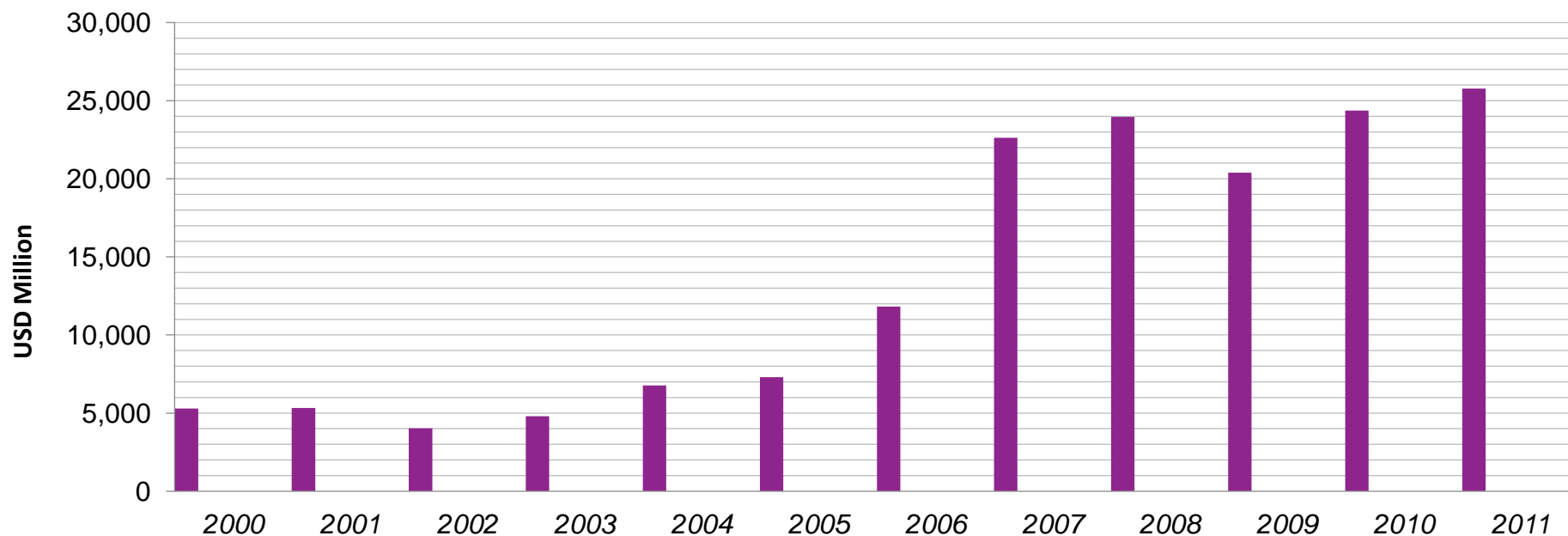


Source: World Bank

Business opportunities with Korean investors

- ❑ In the midst of the current global financial crisis, Korea's economy has remained robust.
 - Since 2000, Korea has been increasing its FDI which reached USD 25 billion in 2011.
 - Based on its national vision of "Green Growth", the Korean government encourages green investment at home and abroad.

Annual Foreign Direct Investment during period of 2000 to 2010



Source: KEXIM Overseas Economic Research Institute

Business opportunities with Korean investors

- ❑ **Korean investors have:**
 - **good understanding of Asia's business practices**
(40.8% (10.5 billion) of Korea's total FDI in 2011 was injected into the Asian market)
 - **emerging needs of off-shore carbon credits following the introduction of the national Emission Trading Scheme (2015)**

- ❑ **Korean investors pursue long-term partnerships rather than project-based approaches.**
 - **higher possibility for scaling up the business**

- ❑ **Obstacles to overcome**
 - **very conservative approach, last minute joiner**
(Investment withdrawal due to lack of clarity on the FIT policy in the Philippines)

Possible investment from Korean investors

Equity
Investment

Strategic Investors (SIs)

- *are* power companies and equipment manufacturers
- *have* longstanding experience and expertise in the power industry as well as strong funding power
- *are* new to the renewables industry
- *have the* desire to participate in both funding and EPC/O&M of projects
- *may have* possibly lower investment criteria to build track records
- *may* provide stronger warranties to cover their limited experience

KOESP(power company) and DSME(manufacturer) jointly developed a 40 MW wind farm in the US, scheduled to commence construction in May, 2012.

Financial Investors (FIs)

- *are* private funds, financial institutions and conglomerates
- *have* high interest in renewable projects in Asia and reasonable hurdle rates
- *have the* desire to work jointly with SIs
- *prefer* experienced EPC/O&M contractors

In 2010, Korea Carbon Fund and LG International invested in a 60 MW biomass project in China. (currently under construction)

Possible investment from Korean investors

Debt Financing

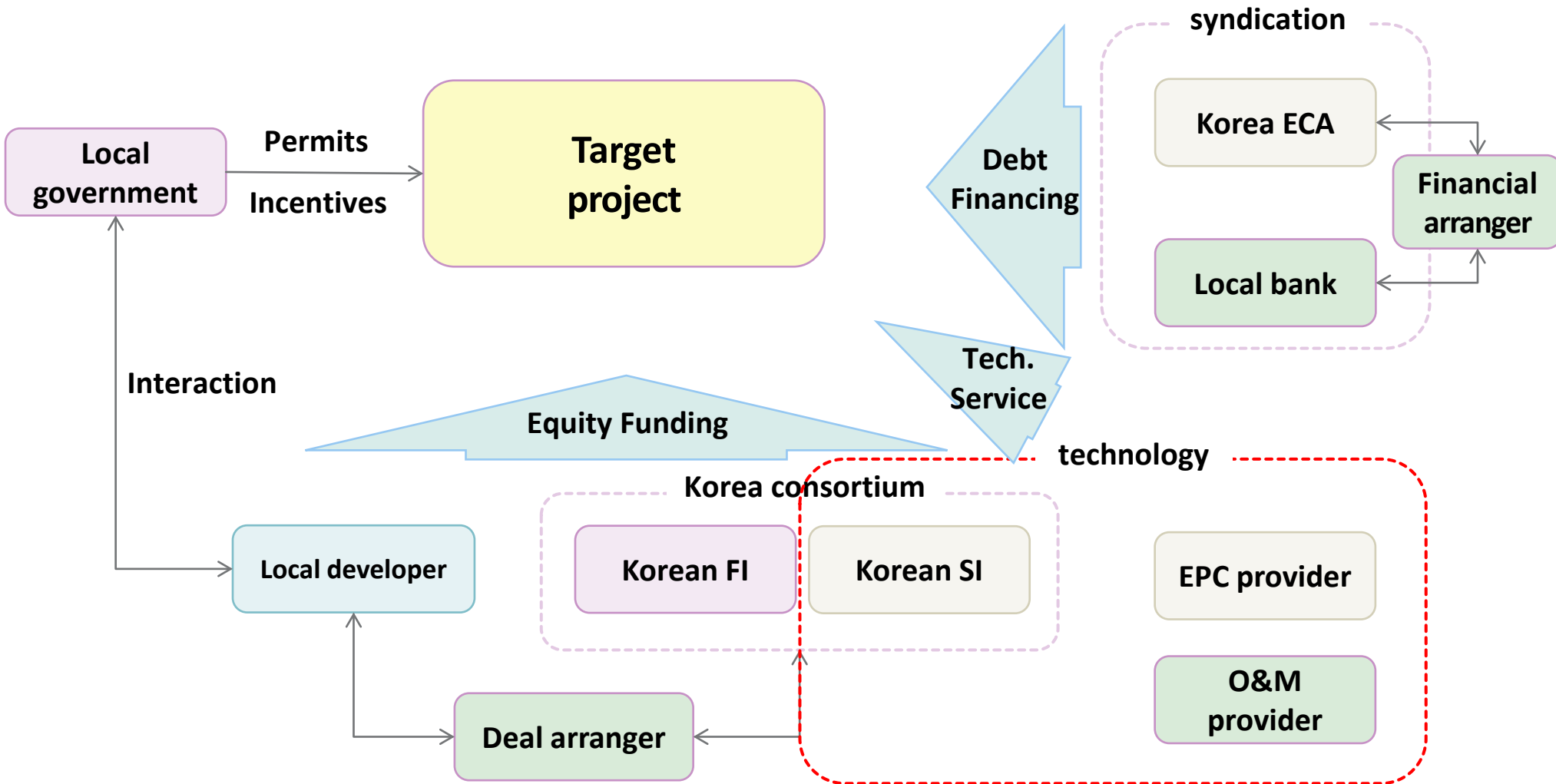
Korean ECAs (KOREA EXIM BANK, KOREA TRADE INSURANCE)

- Multi-billion dollar financing is possible
- *Offer services* only when Korean parties participate in EPC and/or O&M contracts
- *prefer* a syndicated loan structure with local banks

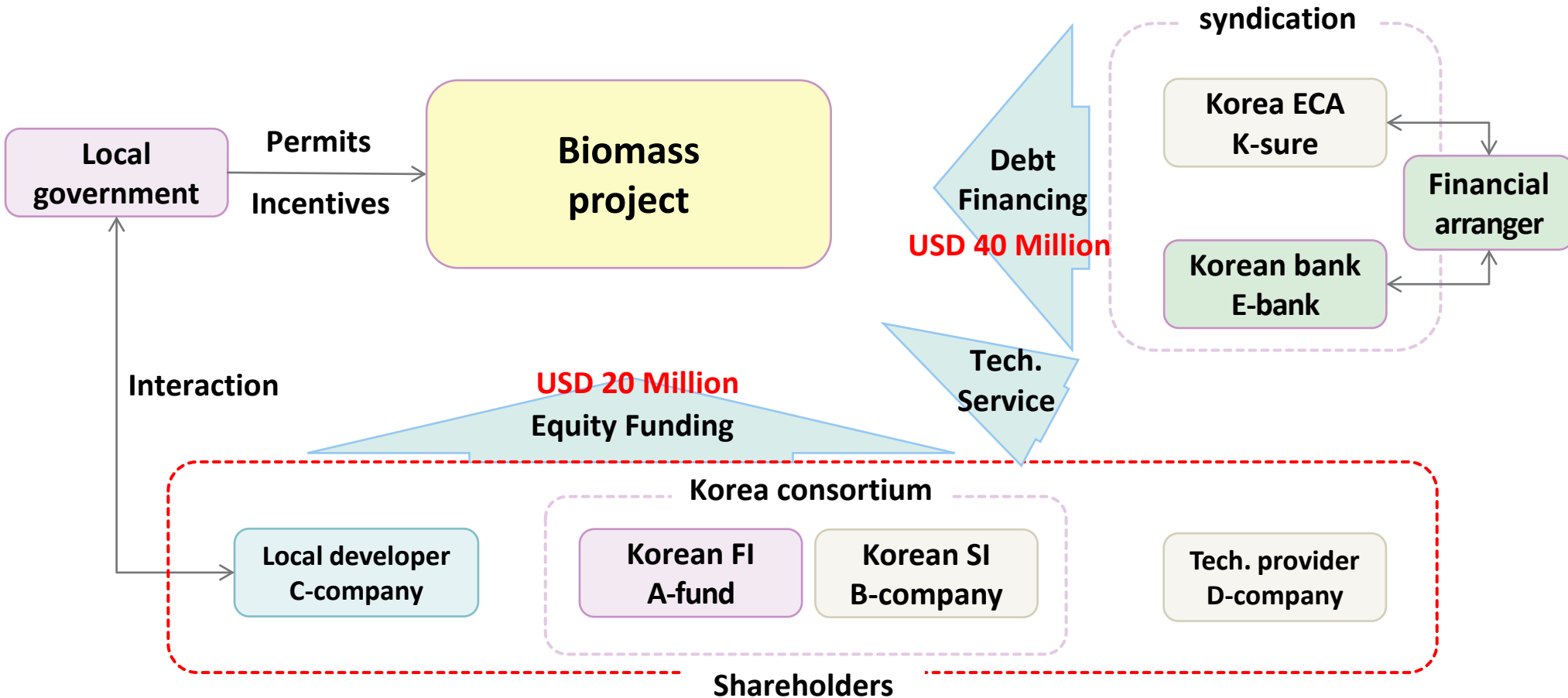
In 2011, KOREA EXIM BANK committed USD 100 million debt financing to a 100 MW wind farm project in the US

Global shift of investors

Example of investment structure



Case study – 60MW biomass project in China



Major risks concerned

□ Major risks

Country Risks

Government permits and policies

- The process of obtaining necessary permits may be delayed or fail.
- lack of transparency in the process of obtaining permits
- unstable or ineffective incentive policies

Local partners

- insufficient financial resources (in general, a minimum investment of 30% of the total equity is required)
- credit insufficient to provide recourse to lender

Technical Risks

Wind source evaluation

- inaccurate forecast of long-term trends due to insufficient data
- doubt in credibility and expertise of evaluation companies.

EPC and O&M

- Price over-run
- insufficient security package of contractors
- argument on performance default between EPC and O&M contractors

□ Major risks

Financial
Risks

Revenue plan

- absence of long term off-take agreement
- lack of predictability of policies, in particular pending status of incentive (e.g. FIT, REC) policies

Sunk cost

- expenses for initial coordination, data gathering & analysis, preliminary due diligence and etc.
- Investors are reluctant to spend any expenses before a firm decision is made.



Identifying solutions for all these concerns and developing projects that meet investors' expectations are key to attracting successful investment.

How to meet investors' expectations

Gap between sellers and buyers

- Many projects are released into the market despite their immaturity in development.
- Further development is needed to meet investors' expectations: the aforementioned concerns should be addressed.

When am I ready?

- When initial milestones such as clearance of all permits and execution of major contracts before disclosing projects for sale have been achieved.
- Or, at least, should have solid plans for the milestones backed by clear timelines and sufficient information.

How do I become ready?

- By preparing a comprehensive solution package from investors' perspective.
- And, in addition, utilizing outside expertise can be an efficient way.

Case study – managing and minimizing the risks

Country Risks

Government permits and policies

- The process of obtaining necessary permits may be delayed or fail.
- lack of transparency in the process of obtaining permits
- unstable or ineffective incentive policies

Important permits such as Environmental Impact Assessment should be completed or in progress before presenting the project to investors.

⇒ **Developers' relationship building with government officials should come first.**

Local partners

- insufficient financial resources (in general, a minimum investment of 30% of the total equity is required)
- credit insufficient to provide recourse to lender

⇒ **Diverse financial instruments should be considered to comply with local regulations as well as to meet stakeholders' needs.**

[case study - biomass project in the Philippines]

The developer contributed 60% of common stocks with corresponding security in the form of parent company guarantee and invited preferred stock investors. (ratio of the common to the preferred – 3:7)

Case study – managing and minimizing the risks

Technical Risks

Wind source evaluation

- inaccurate forecast of a long-term trend due to insufficient data
- doubt in credibility and expertise of evaluation companies

⇒ Quality of data should be enhanced through diverse methods such as third party verification, standardized methodology application and named company's participation.

[case study – Wind farm project in Australia]

+4 years of on-site wind measurement from 3 wind monitoring masts was undertaken by Garrad Hassan.

Nearby long-term (+15 years) reference station exists.

EPC and O&M

- Price over-run
- insufficient security package of contractors
- argument on performance default between EPC and O&M contractors

⇒ Technical risks should be managed through safety harbour clauses in contracts.

[case study – Wind farm project in Australia]

A fixed price/time turn-key EPC contract and a 10 year O&M contract covering both scheduled and unscheduled maintenance (to a cap) were executed with one contractor backed by a resource utilisation guarantee.

Case study – managing and minimizing the risks

Financial Risks

Revenue plan

- absence of long term off-take agreement
- lack of predictability of policies, in particular pending status of incentive (e.g. FIT, REC) policies

⇒ Legal instruments to secure solid revenue stream such as off-take contracts or local policies should be present.

[case study - Wind farm project in Australia]

A 15 year fixed price off-take agreement was executed with a government (AAA- rated) owned utility company.

Sunk cost

- expenses for initial coordination, data gathering & analysis, preliminary due diligence and etc.
- Investors are reluctant to spend any expenses before a firm decision is made.

⇒ Developers need to treat such expenses as marketing costs or investment.

[case study – Biomass project in China]

⇒ The local developer made a solid information memorandum in consultation with a project advisor. The developer was compensated with high premium (paid 10% of total equity but acquired 40% of shareholding).

Questions or Inquiries,

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